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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/057,297	01/25/2002	Jack Wolosewicz	13021-002001	1974
26161	7590	08/23/2005	EXAMINER	
FISH & RICHARDSON PC P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022			DAVIS, ZACHARY A	
			ART UNIT	PAPER NUMBER
			2137	

DATE MAILED: 08/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/057,297

Applicant(s)

WOLOSEWICZ ET AL.

Examiner

Zachary A. Davis

Art Unit

2137

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 20030725.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Oath/Declaration

1. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

It does not identify the citizenship of each inventor.

It does not identify the city and either state or foreign country of residence of each inventor. The residence information may be provided on either on an application data sheet or supplemental oath or declaration.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "30" has been used to designate both the encoding process in Figure 1 and the word processor in Figure 2.
3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: file 22 (see page 5, line 6), hard copy 22a' (see page 6, line 3), document generation program 39 (see page 7, line 27), code generation process 33 (see page 8,

line 1), embodiment 34c' (see page 17, line 12), embodiment 34c'' (see page 12, line 30), and verification process 34d'' (see page 13, line 16).

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 60 (see Figure 1), 122, 124, 126 (see Figure 8), 160 (see Figures 9A and 9B), 190 (see Figure 10B), 202, 204, and 206 (see Figure 11).

5. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

6. The disclosure is objected to because of the following informalities:

The specification contains typographical and other minor errors. For example, on page 1, lines 8-9, the phrase "One aspect of secure" is generally unclear. On page 3, lines 26-27, in the phrase "whether its been printed", "its" should read either "it's", or

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more properly, "it has". On page 4, lines 30-31, reference is made to "document authentication process 30" in reference to Figure 1; however, reference character 30 refers to the encoding process in Figure 1. Further on page 4, lines 31-32, reference is made to "encoding process 32" and "verification process 34" in reference to Figure 1; however, although these reference symbols appear in Figure 2, they do not appear in Figure 1. On page 6, lines 8-9, reference is made to "decoding process 34"; however, reference character 34 refers to the verification process in Figure 2. On page 8, lines 20-26 refer in Figure 4 to steps 56 in which a signature is appended to a file and step 58 in which the signature is stored in a database; however, it appears that these steps are numbered in reverse from Figure 4. On page 13, line 9, it appears that the reference to Figure 10 is instead intended to refer to Figure 10A.

Appropriate correction is required. The above is not an exhaustive list of errors. Applicant's cooperation is requested in correcting any other errors of which applicant may become aware in the specification.

Claim Objections

7. Claims 1, 3, 4, 13-17, 25, and 27 are objected to because of the following informalities:

In Claim 1, line 2; Claim 13, line 3; Claim 16, line 2; Claim 17, line 3; Claim 25, line 4; and Claim 27, line 3, it appears that "comprises" is intended to read "comprising".

Claims 3 and 4 recite "the identified symbols to apply changes to". It appears that this is intended to read "the identified symbols to which changes are to be applied".

In Claim 6, line 1, and Claim 20, line 3, it appears that "font pointers" is intended to read "font change pointers".

In Claim 13, line 6, it appears that "store" is intended to read "stored".

In Claim 14, lines 1-2; Claim 15, lines 1-2; and Claim 26, line 2, it appears that "font change pointers" is intended to read "font change pointer values".

In Claim 13, line 6, and in Claim 16, line 8, it appears that "font change pointers values" is intended to read "font change pointer values".

In Claim 17, lines 5-6, it appears that "a electronic file representation" is intended to read "an electronic file representation".

Appropriate correction is required.

Claim Rejections - 35 USC § 101

8. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

9. Claims 13-16 and 25-28 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The language of the claims raises a question as to whether the claims are directed merely to an abstract idea that is not tied to a technological art, environment, or machine which would result in a practical application producing a concrete, useful, and tangible result to form the basis of

statutory subject matter under 35 U.S.C. 101. Specifically, independent Claims 13, 16, 25, and 27 each recite a step of comparing obtained and retrieved values to determine whether they match. However, there is no recitation or description of how the result of such a comparison and determination are to be used, especially within the context of decoding a document as recited in the preambles of Claims 13 and 16.

10. To expedite a complete examination of the instant application, the claims rejected under 35 U.S.C. 101 above are further rejected as set forth below in anticipation of applicant amending these claims to place them within the statutory classes of invention.

Claim Rejections - 35 USC § 112

11. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

12. Claims 2, 5, 6, 15, 19, 20, and 26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 recites the limitation "wherein identifying is variable" in line 1. This is generally vague, as it is not clear in what way the identifying is or could be varied. This renders the claim indefinite.

Claim 5 recites the limitations “the original symbols” in lines 3-4 and “the electronic file” in line 4. There is insufficient antecedent basis for these limitations in the claims.

Claim 6 recites the limitations “the user” in line 2 and “the electronic file” in line 3. There is insufficient antecedent basis for these limitations in the claims.

Claim 15 recites the limitation “the retrieved font change pointer values” in line 5. It is not clear whether this refers to the retrieved encrypted font change pointer values of line 3 of the claim, or to the retrieved font change pointer values of Claim 13, line 6. This renders the claim indefinite.

Claim 19 recites the limitation “the original symbols” in line 4. There is insufficient antecedent basis for this limitation in the claims.

Claim 20 recites the limitation “the user” in line 4. There is insufficient antecedent basis for this limitation in the claims.

Claim 26 recites the limitation “the retrieved font change pointer values” in line 6. It is not clear whether this refers to the retrieved encrypted font change pointer values of line 4 of the claim, or to the retrieved font change pointer values of Claim 25, line 8. This renders the claim indefinite.

13. Claims 13-16 and 25-28 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. Specifically, although independent Claims 13, 16, 25, and 27 recite a step of comparing obtained and retrieved values to

determine whether they match, the claims omit steps detailing how the result of such determination is to be used. See above regarding the rejections under 35 U.S.C. 101.

Claim Rejections - 35 USC § 102

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

15. Claims 1-15 and 17-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Hirayama et al, US Patent 6782509.

In reference to Claim 1, Hirayama discloses a method of encoding a document that includes identifying symbols to be changed by applying font changes (column 5, lines 57-59) and generating font change pointers that track the changes applied to the identified symbols (column 5, lines 59-67).

In reference to Claims 2, 3, and 4, Hirayama further discloses an algorithm applied to select the identified symbols, namely that the symbols are selected randomly (column 6, lines 50-52).

In reference to Claim 5, Hirayama further discloses substituting changed font symbols for original symbols in identified locations (column 6, lines 33-43; column 12, lines 14-27).

In reference to Claim 6, Hirayama further discloses encrypting and storing the font change pointers (column 8, lines 51-54, noting that a key is used in the pseudo-random generation of the location sequences).

In reference to Claim 7, Hirayama further discloses that the pointers track the font changes (column 5, lines 59-67).

In reference to Claim 8, Hirayama further discloses that the coding depends on the letter being changed (for example, column 12, lines 14-27).

In reference to Claim 9, Hirayama further discloses changing a font to a similar or same font (column 6, lines 33-43, where characters are shifted; column 12, lines 14-27, where a graphic of identical appearance replaces a character).

In reference to Claims 10 and 11, Hirayama further discloses that the font changes can be either discernable (column 8, lines 40-43, where a shift is evident to a reader) or imperceptible (column 12, lines 14-22, where the graphic is identical to the character) to a human.

In reference to Claim 12, Hirayama further discloses changing a font centroid to displace the location of a symbol (column 6, lines 33-43, where characters are shifted).

In reference to Claim 13, Hirayama discloses a method including obtaining font change pointer values that track font changes (column 8, lines 1-6), retrieving font

change pointer values (column 8, lines 12-22), and comparing the obtained and retrieved font change pointer values to determine whether they match (column 8, lines 6-11 and 22-36).

In reference to Claim 14, Hirayama further discloses generating font change pointer values (column 8, lines 3-5).

In reference to Claim 15, Hirayama further discloses retrieving font change pointer values from a file (column 8, lines 3-5 and 51-54).

Claims 17-26 are directed to software implementations of the methods of Claims 1, 3, 5-7, 9, 11-13, and 15, and are rejected by a similar rationale.

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. Claims 16, 27, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirayama in view of Brassil et al, US Patent 6086706.

In reference to Claim 16, Hirayama discloses a method that includes an electronic file having text and generated font change pointer values that track font changes (column 8, lines 1-6), retrieving font change pointer values (column 8, lines 12-

22), and comparing the obtained and retrieved font change pointer values to determine whether they match (column 8, lines 6-11 and 22-36). However, Hirayama does not explicitly disclose generating the electronic file by scanning a document and using optical character recognition. Brassil discloses a method in which a document is scanned and analyzed and a code is decoded to determine a source version (column 4, lines 57-65). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Hirayama to include a step of scanning and analyzing a document, in order to allow identification of the owner of a document, which in turn deters illegal copying by allowing copies to be traced to their original owner (see Brassil, column 1, lines 11-13 and 33-43).

Claims 27 and 28 are directed to a software implementation of the method of Claim 16, and are rejected by a similar rationale.

Conclusion

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Ginter et al, US Patent 5892900, discloses methods by which a fingerprint or watermark can be added to a document using font changes.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zachary A. Davis whose telephone number is (571) 272-3870. The examiner can normally be reached on weekdays 8:30-6:00, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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